U.S. Department of Energy (DOE) / National Renewable Energy Laboratory (NREL)

Workshop on Energy Planning Resources for Puerto Rico

Resource List

- Clinton Global Initiative (CGI) and Direct Relief, **Puerto Rico Solar Map**. GIS-based map of "Solar Generation and Storage Projects at Critical Facilities Since Hurricane Maria." Includes option to add additional projects to the map. https://www.puertoricosolarmap.org/
- Government of Puerto Rico, Central Office of Recovery, Reconstruction, and Resiliency (COR3), **Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico** (August 2018). This 531-page economic and disaster recovery plan "lays out the Government of Puerto Rico's strategic vision and goals and provides a detailed framework for achieving them." Scroll down to the Recovery Plan link. https://www.construimos.pr/en/cor3/
- Institute for a Competitive and Sustainable Economy (ICSE) and Rocky Mountain Institute (RMI), **Public Collaborative for Puerto Rico's Energy Future** (2018). Report includes "recommendations created by a diverse group of participants, reflecting areas of agreement and disagreement, ... to inform new Puerto Rican energy policy." https://www.rmi.org/insight/public-collaborative-for-puerto-ricos-energy-future/
- Puerto Rico Electric Power Authority (PREPA), **Puerto Rico Integrated Resource Plan (IRP) 2018-2019: Draft for the Review of the Puerto Rico Energy Bureau** (February 12, 2019). Prepared by Siemens Industry. From a docket on the Puerto Rico Energy Bureau (PREB) website that contains appendices and additional documents.
  IRP: http://energia.pr.gov/wp-content/uploads/2019/02/PREPA-Ex.-1.0-IRP-2019-PREPA-IRP-Report.pdf
  Docket: http://energia.pr.gov/en/dockets/?docket=CEPR-ap-2018-0001
- Puerto Rico Energy Resiliency Working Group, **Build Back Better: Reimagining and Strengthening the Power Grid of Puerto Rico** (December 2017). NREL is among contributors to this report, the purpose of which is "to provide an assessment of the electric power system storm damage, describe a new system design basis, and propose rebuild recommendations for the Puerto Rico Power and Grid Resiliency rebuild initiative."
  https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/PRERWG_Report_PR_Grid_Resiliency_Report.pdf
- Queremos Sol, **Energy Proposal** (October 2018). "An energy vision that responds to our objectives as a people and that is defined as a social and material, sustainable, resilient and innovative system, based on clean renewable energy, distributed generation and endogenous resources. It is an affordable system that promotes efficiency, ensures equity, fosters broad public participation and capacity building through shared governance and transparency, while producing wealth and local ownership."
  https://www.queremossolpr.com/
- ReImagina Puerto Rico, **Final Reports** webpage. A project of the Resilient Puerto Rico Advisory Commission, created in November 2017, ReImagina Puerto Rico, "developed recommendations to help rebuild Puerto Rico in a way that makes the island stronger – physically, economically, and socially – and more prepared to confront future challenges." The Final Reports page includes links to the 2018 ReImagina Puerto Rico Report, as well as sector reports.
  https://www.resilientpuertorico.org/en/reports-2/

- **Resilient Power Puerto Rico** (RPPR) "engages community groups that provide services in historically underserved communities throughout the Islands and provides technical and financial resources in the form of direct donations for the installation of solar energy systems in communities most impacted by Hurricane Maria." Their work includes a Renewable Energy Microgrid Program, and in partnership with Rocky Mountain Institute the creation of a Community Vulnerability Tool using GIS to map levels of vulnerability across the island. https://resilientpowerpr.org/
- Sandia National Laboratory, **Analysis of Microgrid Locations Benefitting Community Resilience for Puerto Rico** (September 30, 2018). An analysis by Jeffers et al. of using microgrids to increase resilience for the island of Puerto Rico. "Critical infrastructure throughout the island was mapped to the key services provided by those sectors to help inform primary and secondary service sources during a major disruption to the electrical grid." https://www.osti.gov/servlets/purl/1481633
- U.S. Department of Energy (DOE), **Energy Resilience Solutions for the Puerto Rico Grid** (June 2018). "This report contains recommendations for the Government of Puerto Rico to consider for incorporation into its recovery plans... The recommendations reflect principles of resilience, and are intended to inform investments that use federal appropriations in the energy infrastructure in the Commonwealth of Puerto Rico." https://www.energy.gov/oe/articles/office-electricity-releases-energy-resilience-solutions-puerto-rico-grid-report
- U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy (EERE), Federal Energy Management Program (FEMP), **Solar Photovoltaic Systems in Hurricanes and Other Severe Weather** (August 2018). Two-page fact sheet on an expansion of FEMP's "recommended design specifications to include factors and best practices for photovoltaic system survivability identified from recent hurricanes." https://www.energy.gov/sites/prod/files/2018/08/f55/pv_severe_weather.pdf
- U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), **Alternative Procedures** webpage. Provides information on an amendment to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, which authorizes alternative procedures for the Public Assistance program under sections 403(a)(3)(A), 406, 407 and 502(a)(5), … and authorizes FEMA to implement the alternative procedures through a pilot program." Includes links to pilot program guidance documents. https://www.fema.gov/alternative-procedures
- U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), **Hurricanes Irma and Maria in the U.S. Virgin Islands Recovery Advisory 5: Rooftop Solar Panel Attachment: Design, Installation, and Maintenance** (April 2018, Revised August 2018). Ten-page document intended to, "provide guidance on existing code requirements as well as recommend best practices for attachment design, installation, and maintenance of rooftop solar panels … to increase panel wind resistance in the U.S. Virgin Islands." https://www.fema.gov/media-library-data/1535554011182-e061c2804fab7556ec848ffc091d6487/USVI-RA5RooftopSolarPanelAttachment_finalv3_508.pdf
- U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), **Mitigation Assessment Team Report: Hurricanes Irma and Maria in Puerto Rico** (October 2018). Report on conclusions and recommendations of a FEMA Mitigation Assessment Team deployed to PR after hurricanes Irma and Maria. "Intended to provide decision makers, designers, contractors, planners, code officials, industry groups, government officials, academia, homeowners, and business owners and operators with information and technical guidance that can be used to reduce future hurricane damage." https://www.fema.gov/media-library/assets/documents/173789
- U.S. Department of Housing and Urban Development (HUD), **Community Development Block Grant-Disaster Recovery Program (CDBG-DR)** webpage. Includes links to resources and training materials, as well as program news and announcements. https://www.hudexchange.info/programs/cdbg-dr/